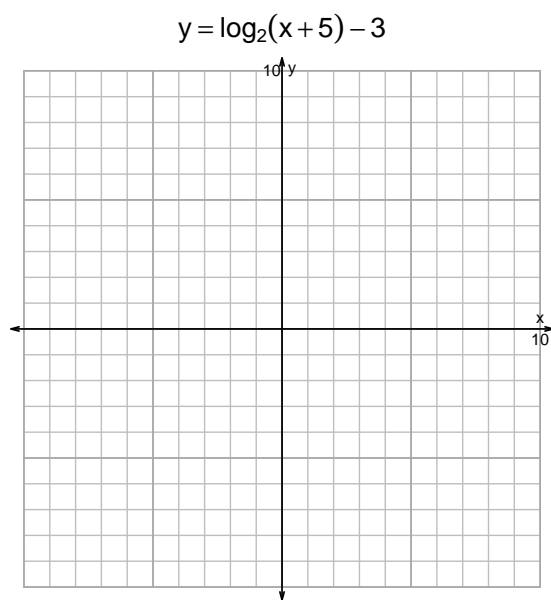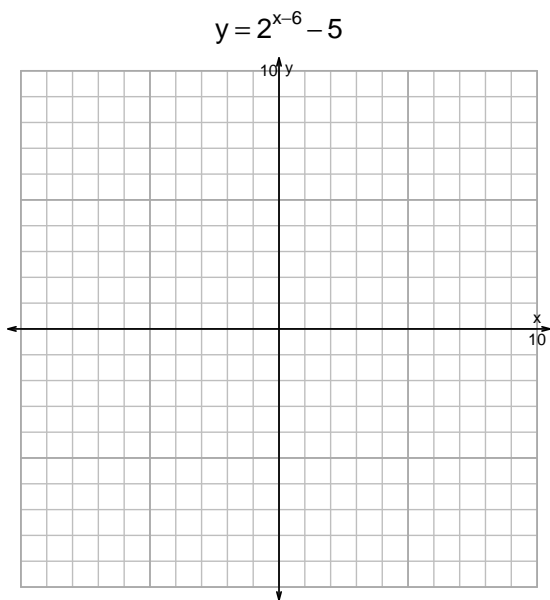Name: _____                                    Date: _____

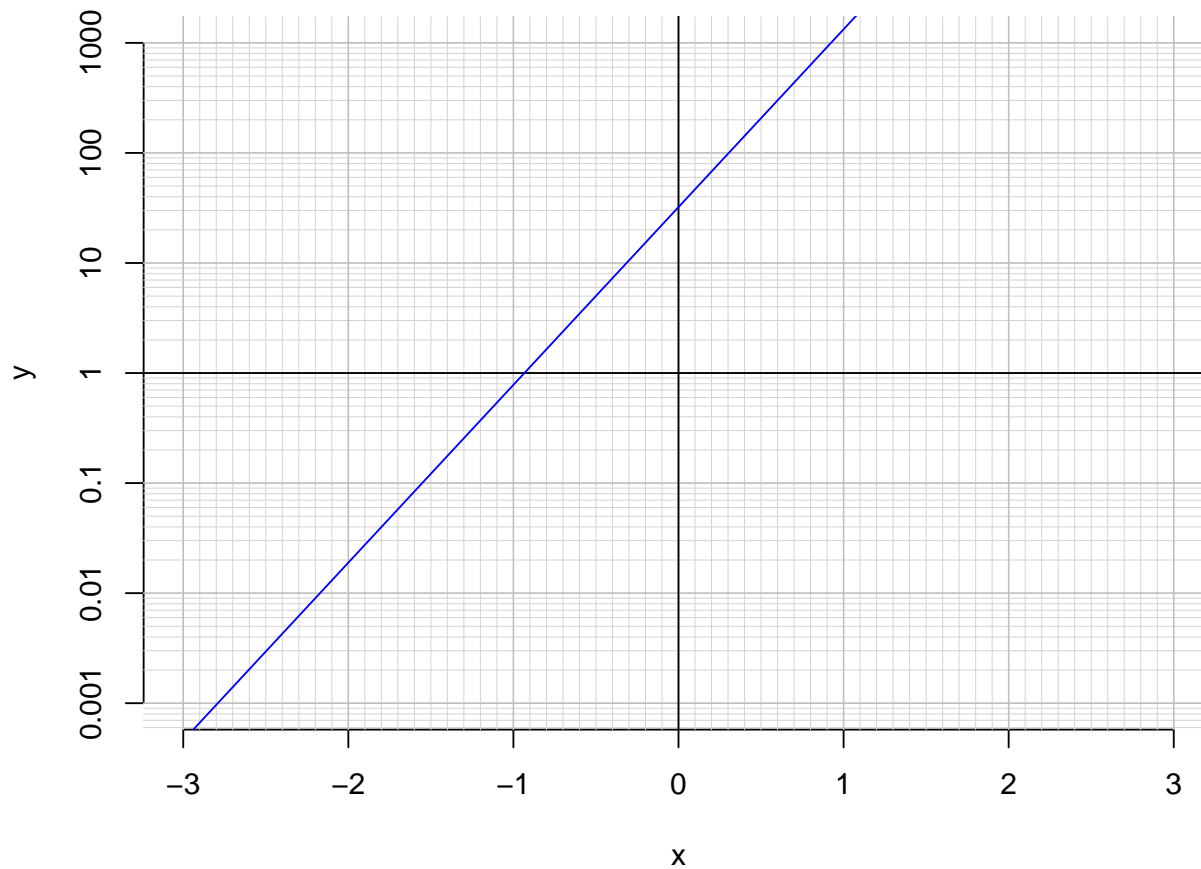## s18quiz: EXP LOG (Practice v121)

1. Graph $y = 2^{x-6} - 5$ and $y = \log_2(x+5) - 3$ on the grids below. Also, draw any asymptotes with dotted lines.

$$y = 2^{x-6} - 5$$



$$y = \log_2(x+5) - 3$$



2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$13 = \left(\frac{3}{4}\right) \cdot 10^{-5t/7}$$

3. An exponential function $f(x) = 32.2 \cdot e^{3.72x}$ is graphed below on a semi-log plot.



a. Using the plot above, evaluate $f(0.6)$.

b. Express $f^{-1}(x)$, the inverse of $f$.

c. Using the plot above, evaluate $f^{-1}(0.009)$.